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SWIDLER BERLIN SHEREFF FRIEDMAN, LLP

ORIGINAL

WASHINGTON OFFICE
3000 K STREET, NW, SUITE 300
WASHINGTON, DC 20007-5116
TELEPHONE (202) 424-7500
FACSIMILE (202) 424-7647

May 5, 2000

NEW YORK OFFICE
919 THIRD AVENUE
NEW YORK, NY 10022-9998
TELEPHONE (212) 758-9500
FACSIMILE (212) 758-9526

VIA HAND DELIVERY

Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, SW
TW-A325
Washington, D.C. 20554

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MAY 05 2000
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: Comments of Telecommunications for the Deaf, Inc.; CC Docket No. 98-67

Dear Ms. Salas:

Enclosed for filing in the above-referenced docket please find an original and six (6) copies of the Comments of Telecommunications for the Deaf, Inc.

Please acknowledge receipt by date-stamping the enclosed extra copy of this filing and returning it to me in the envelope provided. If you have any questions regarding this filing please contact me at (202) 295-8321.

Sincerely,



D. Anthony Mastando

Enclosures

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Before the
Federal Communications Commission
Washington, D.C. 20554

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MAY 05 2000

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Telecommunications Relay Services)
And Speech-to-Speech Services for)
Individuals with Hearing and Speech)
Disabilities)

CC Docket No. 98-67

COMMENTS OF TELECOMMUNICATIONS FOR THE DEAF, INC.
FURTHER NOTICE OF PROPOSED RULEMAKING

Andrew D. Lipman
Michael J. Mendelson
D. Anthony Mastando
SWIDLER BERLIN SHEREFF FRIEDMAN, LLP
3000 K Street, NW, Suite 300
Washington, DC 20007-5116

Dated: May 5, 2000

SUMMARY

Telecommunications for the Deaf, Inc. (“TDI”) is a national advocacy organization actively engaged in addressing issues of equal access to telecommunications and media for persons who are deaf, hard of hearing, late deafened and deaf-blind. TDI contends that equal access to telecommunications services, equipment and technology ensures that persons with disabilities have the same educational and employment opportunities as other Americans. Because telecommunications binds our society together, it is critically important for Telecommunications Relay Service (TRS) users to achieve a level of communications that is functionally equivalent to that of people who do not need TRS. Accordingly, TDI urges the Commission to support TRS by establishing education and outreach programs, insisting on the deployment of existing technologies that would improve TRS, and encouraging the development of new technologies. In addition, TDI reiterates the importance of creating a separate advisory mechanism to address TRS quality issues. The success of outreach/education activities at national, regional, state, and local levels, along with incentives for research and development in new and emerging technologies, will render TRS an evolving “state of the art” telecommunications service that would be used frequently at ease by all Americans.

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**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Telecommunications Relay Services)	CC Docket No. 98-67
And Speech-to-Speech Services for)	
Individuals with Hearing and Speech)	
Disabilities)	

**COMMENTS OF
TELECOMMUNICATIONS FOR THE DEAF, INC.**

Telecommunications for the Deaf, Inc. ("TDI"), by its counsel, hereby submits its comments in response to the Federal Communications Commission's ("Commission") Further Notice of Proposed Rulemaking in the above-referenced docket.¹

I. INTRODUCTION

TDI is a national advocacy organization actively engaged in addressing issues of equal access to telecommunications and media for persons who are deaf, hard of hearing, late deafened and deaf-blind. TDI contends that equal access to telecommunications services, equipment and technology ensures that persons with disabilities have the same educational and employment opportunities as other Americans. Only by ensuring such equal access will society benefit from the skills and talents of persons with disabilities.

TDI applauds the Commission's efforts to ensure that all Americans, including those who are deaf, late deafened, hard-of-hearing and deaf-blind, benefit from the rapid technological

¹ *In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CC Docket No. 98-67, Report and Order and Further Notice of Proposed Rulemaking, FCC 00-56 (rel. March 6, 2000) ("FNPRM").

advancements in today's fast-paced telecommunications marketplace. TDI is also encouraged by the Commission's willingness to solicit comments on policy matters surrounding telecommunications relay service ("TRS") and wishes to emphasize the importance of this proceeding to the deaf and hard of hearing community.

As the Commission acknowledged, section 225 of the Communications Act of 1934, as amended ("the Act"), mandates that the Commission ensure that interstate and intrastate relay services are available throughout the country and to establish regulations to ensure the quality of relay service.² The Act works in tandem with the Americans with Disabilities Act of 1990 ("ADA") to bring about equality for individuals with disabilities. Congress directed that Title IV of the ADA, which is codified at section 225, "requires the Commission to ensure that telecommunications relay service is available, to the extent possible and in the most efficient manner, to individuals with hearing and speech disabilities in the United States."³ Notwithstanding, the Commission concedes that "[t]here are emerging and existing technologies that we have not yet fully evaluated for inclusion in relay service."⁴ TDI need not convince the Commission of the critical role telecommunications plays in our lives. The Commission must fulfill its duty responsibly so that millions of Americans are not stranded without the ability to communicate effectively or participate in our society as full citizens. Achieving "functional equivalence" is the cornerstone of TDI's comments presented herein.

² 47 U.S.C. § 225(b).

³ Pub. L. No. 101-336, § 401, 104 Stat. 327, 366-69 (1990) (adding section 225 to the Communications Act of 1934, as amended, 47 U.S.C. § 225).

⁴ FNPRM at para. 125.

II. EDUCATION AND OUTREACH

In the FNPRM, the Commission asks for comments on various aspects of a proposed nationwide awareness campaign that would reach all potential TRS users, consumers with disabilities, individuals who are late deafened, potential STS users and the general public.⁵ As an initial matter, TDI welcomes all efforts to raise awareness of TRS. Without widespread knowledge and appreciation of TRS, improving the ability of TRS users and potential users to communicate will be that much more difficult. TDI is convinced that “awareness” is a good first step toward remedying some of the existing problems of relay service. In fact, TRS users must routinely contend with:

- Slowness of typed transmission of spoken words.
- Inability to speak at a normal pace.
- Inability to inject thoughts spontaneously.
- Gaps of silence for hearing party while waiting for a response.
- Constant reminder of third-party involvement.
- Monotone voicing by CAs rather than adopting a conversational tone of voice.
- Inability to transmit in real-time in both directions.
- Relay calls appear to be telemarketing calls to first-time relay users, resulting in hang-ups.
- CA accents which are not native to the region of the caller.
- Lack of access to all public switched telephone network (“PSTN”) functions.⁶

To increase the likelihood of the success of a national outreach program, TDI asserts that first defining “functional equivalence” in the Commission’s rules will add focus to the advertising campaign because “functional equivalence” is the ultimate goal of TRS. The

⁵ See FNPRM at paras. 134-36.

⁶ Information and input obtained from the National Association of the Deaf—Telecommunications Advocacy Network (“NAD-TAN”) listserve discussion, April-May 2000. TDI reiterates the TRS Coalition’s recommendation to create a TRS Advisory Council that would address these and other TRS needs on an ongoing basis. See *Ex Parte* Comments of TRS Coalition in Docket 98-67 (filed February 7, 2000) (“TRS Coalition *Ex Parte* Comments”).

Commission should define “functional equivalence” in a manner that recognizes the full functionality of a telephone call. TDI invites the Commission to consider the following definition posited by the TRS Coalition:

Functional Equivalence. Performance in a TRS call of substantially the same function to achieve the same result as that in a voice-to-voice telephone call by individuals who do not need TRS for effective communications. Functionally equivalent communications must ensure efficient telephone calls that include equal costs to consumers, call blockage no different than that experienced by voice-to-voice non-TRS callers, allowing choice of carriers by all types of toll calls, and real-time communications in transmission and reception of text and speech, using advanced and efficient technology, as it becomes technically feasible.⁷

TDI urges the Commission to take decisive action on a national scope to institute an ongoing awareness program. TDI asserts that a directed, funded, national effort will yield the most pervasive results and maximize the benefit to the general public, TRS users, vendors, telecommunications providers, and the state public utility commissions. The economies of scale available to a national campaign would provide access to untapped media outlets, which in turn should increase usage and ultimately the quality of TRS. Advertisements in mainstream periodicals, including newspapers, magazines, newsletters and business publications, can increase the employability of TRS users because the public will learn that TRS can bridge the communications gap. TDI welcomes a campaign to convey images of people who are speech- and hearing-disabled as functioning members of our society and the economy, empowered by TRS. The airing of primetime and drivetime advertisements or public service announcements on television and radio on syndicated, network or national programming can expose and educate millions of Americans to a service most of which unknowingly support.

⁷ TRS Coalition *Ex Parte* Comments.

The interstate TRS Fund, managed by NECA, is a logical and appropriate mechanism for funding a national outreach campaign. The interstate TRS Fund has an established organization and structure for controlling TRS monies and can be readily modified to accommodate this marginal, additional burden. Moreover, vendors and telecommunications carriers already are familiar with the relevant reimbursement and contribution processes. Directing the national outreach campaign through the TRS Fund Administration will obtain these same efficiencies. Modifying the existing TRS Fund and Administration to serve as a repository for national outreach monies will minimize the creation of parallel and redundant bureaucracies and use the expertise and infrastructure already in place. Importantly, adequate funds should be earmarked expressly for outreach efforts, not commingled in a general account. To do otherwise would risk creating a hollow mandate or siphoning/diverting funds from one program at the expense of the other. Outreach efforts should cover the wide variety of unique needs of relay users with an appropriate portion devoted to speech-to-speech as well.

The Interstate TRS Fund Advisory Council must be charged with the administration of reimbursement for the national education and outreach efforts and their mission modified accordingly. The Interstate TRS Fund Advisory Council, with input from all stakeholders, must be imbued with sufficient authority to establish outreach guidelines and procedures, to coordinate with state and regional efforts, and to collaborate with a future advisory mechanism (if established by the FCC) that only addresses quality issues. TDI encourages the inclusion of TRS users in an advisory role with both the Interstate TRS Fund and the TRS quality issues mechanism because they have a better understanding of capabilities and shortcomings of the nation's relay programs. The contributions of such ready experts must not be overlooked.

Regardless of the body overseeing the national outreach program, a crucial first step would be to measure the public's awareness of TRS services prior to the initiation of any advertising. Such a measurement would establish a baseline by which to assess the effectiveness of the outreach campaign. This is one of the many successful elements of Wisconsin's outreach program worthy of replication on a national level. TDI also encourages the compilation and publication of call volume data. Such call volume data would not be individually identifiable (*i.e.*, not reveal the identity of any calling parties), but would be maintained in the aggregate by type of call. To enable consumers and particular types of users to advocate for outreach effectively, call volume data must be made public. The Commission should provide a means to make available both interstate and intrastate call volume data for each state at least quarterly. These are public records for services paid by taxpayers and, accordingly, should be made available. As most states only have one TRS provider, the proprietary value of keeping call volume data confidential to the TRS provider is minimal. Greater public good is derived by making the data public than keeping the data confidential. TRS providers may prosper by publication of call volume data given the additional publicity and outreach funding tied which could be linked to the call volume. In turn, additional outreach could spur additional calls, thereby increasing revenue for providers.

TDI encourages the simultaneous and independent formation of state-level advisory mechanisms supported by intrastate telecommunications funding for the twin goals of increasing awareness and education. For example, the town hall meeting concept has quite effectively educated communities about TRS. TRS users, businesses and media contacts attend these meetings to learn what's new with relay services, ask questions, make recommendations for service enhancements, and meet TRS administrators and TRS providers. Newsletters are another

effective form of in-depth education and training and are especially helpful to those who cannot attend town hall meetings. Schools, chambers of commerce, and training seminars are some of the many forums conducive to outreach and education efforts coordinated on a state-level. Most importantly, TDI recommends a partnership between the national and state-level outreach programs. One such joint venture could have the national outreach program develop and supply standardized educational materials for the state programs to distribute.

III. SS7 ACCESS

TDI concurs with the Commission's assessment that access to Signaling System 7 ("SS7") technology by TRS centers would "significantly improve the quality of relay services."⁸ TDI emphatically agrees with the Commission's tentative conclusion that TRS users should have the ability to use Caller ID, equal access to 911, and other SS7 features.⁹ The Commission must adopt rules that will obviate the need for TRS centers to collect caller profiles manually when that information resides within the intelligence of SS7.

The Commission seeks comment on whether its rules should be amended to include TRS providers as lawful recipients and users of SS7 data, because current rules do not permit entities other than common carriers to purchase SS7 service.¹⁰ TDI believes that the Commission has the authority to allow entities other than common carriers to purchase SS7 service and ought to amend its rules accordingly. TDI notes that when implementing section 225 of the Act, the Commission required relay providers to perform certain telecommunications functions such as capturing the ANI, generating call detail records, routing calls to the user's carrier of choice, and

⁸ FNPRM at para.127.

⁹ FNPRM at para. 129.

¹⁰ FNPRM at para. 127; *see* 47 C.F.R. § 64.1600(f).

routing for toll-free type of calls among other functions generally provided by common carriers. TRS centers routinely use this information to place calls for TRS users. In a sense, relay providers already have access to SS7-type data, they just have to perform these functions by hand! Therefore, security or confidentiality of the underlying SS7 data has been a concern of the Commission. TRS center personnel, however, are already entrusted and obligated to keep certain caller information confidential.¹¹ In addition, the Communications Act provides the Commission ample authority to permit TRS centers to access, purchase and use SS7 data.¹²

A simple long distance telephone call provides an especially frustrating illustration of the difficulties facing TRS users--a problem that use of SS7 data would alleviate. Currently, the burden rests with the TRS user to provide CAs preliminary set-up information for TRS calls, such as their presubscribed choice of interexchange carrier, each and every time a user wishes to place a call. Voice users are not required to compile profiles manually prior to the initiation of each call. Such information resides in the SS7 data and is automatically used in the completion of a long distance call made directly to the recipient. Because of the interim step of contacting a TRS provider, SS7 data for individuals with hearing- and speech-disabilities is not automatically conveyed beyond the TRS provider. TDI does not suggest that the Commission prohibit the use of profiles on the basis of inequality, because they are a useful and convenient tool.¹³ Rather,

¹¹ See 47 U.S.C. § 225(d)(1)(f); 47 C.F.R. § 64.604(a)(2) (CAs are prohibited from disclosing the content of any relayed conversation). Moreover, the content of a call is typically more sensitive than the underlying SS7 data.

¹² See 47 U.S.C. §§ 151, 154(i), 303(r).

¹³ While useful, profiles have certain limitations. They do not work well (1) in a PBX environment, (2) for those who need a "portable profile" when making calls to other TRS centers or (3) individuals who share the same telephone number. Information and input obtained from the NAD-TAN listserve discussion, April-May 2000. TDI is pleased that the TRS centers are permitted to collect and store information about their callers in order to efficiently handle calls. CAs create and maintain personal profiles on TRS users so that they can correctly and efficiently

every reasonable effort should be made to automate such data collection. Use of SS7 technology facilitates functional equivalency. TDI wholeheartedly agrees with the Commission's statement that, "TRS providers' current practice of building databases manually by interviewing each TRS user does not appear to be the most efficient manner of providing TRS."¹⁴ As the Commission stated in its FNPRM, SS7 data should resolve problems with Caller ID for TRS users.¹⁵ TDI asserts that use of Caller ID to screen incoming calls is an essential tool of deaf, late-deafened, and hard of hearing consumers and that the Commission should take the necessary steps to see that TRS users have access to it. Accordingly, TDI concurs with the Commission's conclusion that the Caller ID box of a customer who receives a TRS call should display either the TRS center's telephone number or a standard TRS number, such as 711. Problems with Caller ID also can have inadvertent effects on TTY users who place calls to individuals with Reveal and Anonymous Call Rejection ("ACR"). With ACR, the calling TTY signal can be blocked because it tends to generate a "number unavailable" message that the telephone system's automated recovery system exacerbates by "asking" the person with hearing or speech difficulties to state their name or number. Moreover, attempts to navigate this problem with the assistance of the TRS provider do not work because the telephone system "times-out" before the caller can respond via relay.

handle future calls. In fact "[s]ome of the information regularly collected overlaps a caller's subscriber list information which is included in SS7 data." FNPRM at para. 128.

Moreover, an STS users may spend 15 minutes dictating an initial message only to reach a busy line or no answer. The ability to store and retrieve this information is a humane accommodation for STS users. Storage and retrieval thus provides equal access in the sense that able bodied speakers can repeat themselves as easily.

¹⁴ FNPRM at para.128.

¹⁵ FNPRM at paras. 129-30.

Although TDI urges the adoption of SS7 technology, TDI does not suggest that the Commission ossify its regulations around a particular technology. To the contrary, section 7(a) of the Act, requires that the Commission facilitate the use of existing technology without discouraging the development of improved technology.¹⁶ This twofold purpose should lead the Commission to conclude that because SS7 technology is imbedded in the public switched telephone network (“PSTN”) its capabilities must be included as a requirement for relay providers today. Furthermore, in order to meet the statutory objectives, the Commission should encourage TRS providers to incorporate and develop newer technologies in the future. While TDI advocates adopting an SS7-based platform today, or one with capabilities that can bring equivalent access, TDI also insists that any newer technology, such as digital or Internet platforms, be implemented contemporaneously to ensure that deaf, late-deafened, hard of hearing, and deaf-blind individuals receive the same benefits available to the general public. Again, TDI urges the Commission to establish and utilize a TRS Advisory Council to monitor all related quality and access issues, as separate from the Interstate TRS Fund Advisory Council that would administer reimbursement under the Fund.

Failure to require the implementation of SS7, or its attendant capabilities, would undermine the Commission’s own plan to improve the quality of traditional relay services and to ensure a telecommunications network that is functionally equivalent to the access enjoyed by Americans without disabilities. It would be difficult to square the Commission’s promise “that our rules require that TRS be capable of handling any type of call normally provided by common

¹⁶ 47 U.S.C. § 7(a).

carriers”¹⁷ with the fact that SS7 enabled services are inaccessible to people who are hearing- or speech-disabled.

TDI asserts that the cost of upgrading TRS centers should fall largely on the telecommunications carriers because they are responsible under the law to ensure that people with disabilities have functionally equivalent access to the PSTN and are charged with collecting for such services.¹⁸ Regardless of how the cost is apportioned among telecommunications carriers, subscribers and/or vendors, TDI urges the Commission to revisit the current funding formula, which has been in use since relay’s inception, because it has yet to adequately compensate or provided the appropriate incentives for vendors to offer relay services that approximate functional equivalency.

The Commission’s rules require relay providers to handle any type of call normally provided by common carriers.¹⁹ Common carriers smoothly and routinely handle 911 calls, caller ID, call release, automatic call forwarding, interrupt capability, answering machine retrieval, extended community call blocking, pay per use feature blocks, call waiting, return call and call back, three way calling, speed dialing, distinctive ring, and repeat dialing. It seems obvious to TDI that the Commission should empower TRS providers to handle these types of calls by adopting rules that give TRS providers use of the necessary signaling protocols, without delay.

¹⁷ FNPRM at para. 138.

¹⁸ *See, e.g.*, 47 U.S.C. §§ 225(c), 225(d)(1)(3)(B); 47 C.F.R. § 64.604(a)(3).

¹⁹ 47 C.F.R. § 64.604(a)(3).

IV. TECHNOLOGIES, FEATURES AND SERVICES

The Commission seeks comment on features and configurations that would enable consumers with hearing and speech disabilities to communicate through relay services.²⁰ TDI contends that the minimum standard for equipment and service configurations is that which allows for a conversation that is functionally equivalent to a conversation enjoyed between two people, both of whom can hear and speak. Configurations should support users at home and at work and should include, but not be limited to, automated text-to-speech and speech-to-text, the inclusion of SS7 and future functionalities, video relay services. TDI would like to see the incorporation at TRS centers of computer software and hardware technologies such as Internet Relay Chat (used as a basis for ICQ and AOL Messenger), Computer Assisted Real-Time Translation, voice recognition applications and webcams with interpreters.

TDI encourages the Commission to create incentives for TRS providers and other telecommunications providers to research, develop and implement new technologies. TDI is particularly concerned that certain state funding mechanisms act as a disincentive to high quality and faster relay conversations because contracts are awarded and reimbursed based on the lowest per-minute charges. TDI concurs with the comments of the TRS Coalition in that “technological innovation has remained stagnant since the FCC first established minimum standards [and that] without incentives, states and vendors have ignored the FCC’s stated objective that nothing should impede new technological developments and improvements.”²¹ TDI therefore urges the Commission to promote the development and implementation of real-time transmission and

²⁰ FNPRM at para. 138.

²¹ TRS Coalition *Ex Parte* Comments.

closer approximation of functional equivalence. Otherwise, in most states, minimum standards will be maximum achievements.

Regarding specific features and services, the Commission detailed two-line VCO, voice to text (VTT), two line HCO, reverse VCO, reverse HCO, VCO to TTY, VCO to VCO, HCO to TTY, and HCO to HCO, call release, automatic call forwarding, interrupt capability, answering machine retrieval, extended community call blocking, pay per use feature blocks, call waiting, return call and call back, three way calling, speed dialing, distinctive ring, and repeat dialing.²² While TDI is of the opinion that these are all equally important, TDI encourages the Commission to consider further the unique TRS needs of consumers who are deaf-blind.

Additionally, TDI contends that those features that enable TRS users with disabilities to compete on equal footing with people without disabilities in the telecommunications-saturated world of business are especially crucial. For example, when a TRS user is away from the office on business and needs to check messages, answering and voice-mail message services are critical. In addition, interrupt capability is important to prevent “monologue-type” qualities of asynchronous text transmission versus the synchronous nature of voice calls (being able to interrupt, interject, etc.) and is currently available to some TRS users.

A. Communication Protocols for Relay

To date, the Commission has left decisions about technology for relay platforms to the discretion of the relay provider, as long as both Baudot and ASCII are supported “at any speed

²² FNPRM at para. 138.

generally in use”²³ TDI wishes to see implementation of any new communication protocol that provides a speed that is “generally in use” and commercially tested within the market place.

The Commission correctly noted that transmission protocols for TTYs have evolved since the initial guidelines for TRS were established. TDI is pleased to see that TRS centers currently support all open protocols and that thirty-five states,²⁴ and all the national interstate providers, currently offer the enhanced protocol, Turbo Code. Enhanced protocols permit more efficient communications. TDI strongly urges the Commission to require prompt implementation of new, faster protocols as soon as they are commercially available and have widespread use among TTY users (perhaps measured by significant distribution in state equipment programs), unless the TRS provider can affirmatively establish that such a protocol is not technically feasible. Thus, TDI strongly urges TRS providers to implement any new communication protocol that when it is deployed in any state and is commercially available to end-users.²⁵

B. V.18 Data Solution and VCO.

Current TRS regulations require all relay providers to provide VCO/HCO capabilities. TDI wants to ensure the technology access solutions support VCO capabilities. TDI understands that Lucent and Ericsson have developed a digital “vocoder-related” solution that supports VCO/HCO use, as well as text-based digital cellular TTY calls. By comparison, the Interworking Function (IWF) data channel solution, using V.18 modems, cannot support

²³ 47 C.F.R. § 64.604(b)(1).

²⁴ The following states currently offer Turbo Code for TRS: WA, OR, CA, NV, AZ, UT, MT, WY, CO, ND, OK, TX, MN, IA, MO, WI, IL, IN, KY, TN, GA, NC, SC, PA, DC, MD, NJ, PA, MA, NH, ME, VA. Other states, ID, NE, LA, expect to implement it by the summer of 2000.

²⁵ While not directly related to relay, TDI is aware of an additional matter raised in TTY Forum regarding a V.18 data solution for digital wireless 9-1-1 phone calls. To the extent that voice

VCO/HCO use. Should a V.18 solution be implemented and the digital text-based consumer is a VCO user, the IWF approach would not allow a consumer to use VCO for their TRS calls. We understand that one cellular manufacturer is looking at switching on and off signals in the IWF set up, which could allow VCO. The manufacturer's solution, however, may not solve the VCO/HCO access problem because both the handset and the base need to be capable of handling to VCO and HCO.

C. Digital Connections for TTY users.

The Commission asks whether TTY users who have digital telecommunications services and equipment can access TRS through direct digital connections or must they use analog devices. TDI is aware that some digital telecommunications service users are able to use their TTYs on ISDN and PBX networks by using their TTY acoustically or using an analog port within the digital network or via a LAN network and modem pool set up. The few DSL users of which TDI is aware, report that they are able to directly connect their TTYs to DSL lines. Since the DSL line has an analog frequency the analog-based devices "grab" the analog channel.²⁶ TDI hopes that research and development conducted within the scope of the Section 255 will alleviate the need for analog ports. TDI urges the Commission to encourage industry to accept direct data calls that are not first converted to analog and to adopt "direct-digital" communications initiatives.

callers get priority on wireless networks, it poses a significant safety requiring immediate FCC scrutiny.

²⁶ Information and input obtained from the NAD-TAN list serve discussion, April-May 2000.

TDI joins other advocates in full support of the development of a modem sold over the counter that provides for capabilities for universal compatibility with all text-telephone users, in the U.S. and internationally.

D. STS Relay Services.

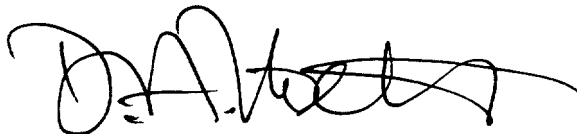
TDI supports the establishment of a separate, nationwide toll-free number for speech to speech (“STS”) relay services. STS relay serves a small but important constituency. Communications Assistants (“CAs”) must be specially trained to handle STS calls and through extensive experience learn particular callers’ needs. Consequently, concentrating these calls through a separate, nationwide toll-free number would be the best use for these highly trained assistants. STS users should also be permitted three-digit dialing, just as proposed for TTY relay users. N11 access is especially important for this population because the brain damage that often causes speech disabilities can also cause manual dexterity limitations and memory loss. Having to dial only three numbers, versus eleven, when one’s hands or memory do not work well makes using the telephone that much easier.

V. CONCLUSION

TDI invites the Commission to foster an environment whereby individuals with hearing- and speech-disabilities can hold a telephone conversation a manner that is functionally equivalent to callers who do not regularly access TRS. TDI reiterates the importance of the FCC’s immediate establishment of a separate advisory mechanism, if not an administrative mechanism to address TRS quality issues. The success of outreach/education activities at national, regional, state, and local levels, along with incentives for research and development in new and emerging

technologies, will render TRS an evolving "state of the art" telecommunications service that would be used frequently and at ease by all Americans.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "D. Mastando", written over a horizontal line.

Andrew D. Lipman
Michael J. Mendelson
D. Anthony Mastando
SWIDLER BERLIN SHEREFF FRIEDMAN, LLP
3000 K Street, NW, Suite 300
Washington, DC 20007
(202) 424-7500 (phone)
(202) 424-7645 (fax)
Counsel for Telecommunications
for the Deaf, Inc.

Claude L. Stout
Executive Director
Telecommunications for the Deaf, Inc.

May 5, 2000

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